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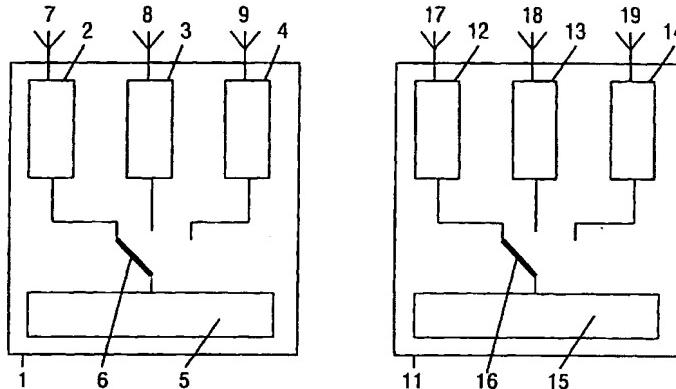
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(54) Title: TELECOMMUNICATION SYSTEM WITH SWITCHED TRANSMIT/RECEIVE CHAINS FOR UNCORRELATING CORRELATED NOISE



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(57) Abstract: Telecommunication systems comprising transmitting units (1) and receiving units (11), with units (1 resp. 11) comprising parallel chains (2-4 resp. 12-14) coupled to processing parts (5 resp. 15), have enhanced data rates / channel capacities, under the assumption that the noise in the chains (2-4 resp. 12-14) is uncorrelated. Correlated noise from external noise sources decreases said rates / capacities. By coupling said chains (2-4 resp. 12-14) to said processing parts (5 resp. 15) via switches (6 resp. 16) for uncorrelating correlated noise in said chains (2-4 resp. 12-14), any correlated noise present in chains (2-4 resp. 12-14) is made uncorrelated. Said switch (30,50,70) (over/sub)samples chain signals, and is further coupled to said processing part (32,52,72) for controlling purposes to switch randomly or programmedly, with said processing part (32,52,72) and said switch (30,50,70) operating synchronically. Said switch (30,50,70) comprises a (de)multiplexer, with a chain comprising at least an antenna (21,22,41,42,61,62) and possibly an amplifier (25,26,43,44) and a mixer (27,28) coupled via said switch (30,50,70) to said processing part (32,52,72) comprising at least a filter (37,57,77), a converter (38,58,78) and a processor (39,59,79) and possibly said mixer (56,76) and said amplifier (75).



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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According to International Patent Classification (IPC) or to both national classification and IPC

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Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 057 758 A (ADACHI FUMIYUKI ET AL) 8 November 1977 (1977-11-08) column 2, line 8 - line 19 column 2, line 39 - line 49; figure 1 column 3, line 23 - line 61; figures 3-8 ---	1-12
A	TAYLOE D R: "SPACE DIVERSITY HOPPER FOR DIGITAL DATA TRANSMISSION" MOTOROLA TECHNICAL DEVELOPMENTS, MOTOROLA INC. SCHAUMBURG, ILLINOIS, US, vol. 10, 1 March 1990 (1990-03-01), pages 62-63, XP000114646 ISSN: 0887-5286 page 62, paragraph 3 - paragraph 4; figure 1 --- -/-	1-12

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 196 21 199 A (BOSCH GMBH ROBERT) 27 November 1997 (1997-11-27) column 3, line 12 - line 35; figures 1,2 ---	1-12
A	JAKES W C: "A COMPARISON OF SPECIFIC SPACE DIVERSITY TECHNIQUES FOR REDUCTION OF FAST FADING IN UHF MOBILE RADIO SYSTEMS" IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, IEEE INC. NEW YORK, US, vol. VT-20, no. 4, 1 November 1971 (1971-11-01), pages 81-92, XP002052299 ISSN: 0018-9545 chapter B.3) figure 5 -----	1-12

INTERNATIONAL SEARCH REPORT

Information on patent family members

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